Amendments to the Specification:

Please replace paragraph 14, located on page 5, with the following paragraph showing amendments.

--Springs may also be aligned with piezoelectric generators, or arrays, in order to increase the number of times that those piezoelectric elements are strained for each strain-providing force. For example, springs may be included in ~~an~~ a piezoelectric array that is placed in a shoe. Thus, a piezoelectric array may be strained more than once (e.g., twice) each time ~~that~~ a heal strike occurs.--

Please replace paragraph 33, located on pages 8 and 9, with the following paragraph showing amendments.

--Persons skilled in the art will appreciate that there are multiple ways to fabricate a piezoceramic that creates an electrical voltage when bent. In one method, two compressing piezoceramics are stacked together. ~~However~~ However, the piezoceramics are polarized in opposite directions. Thus, when an electric potential is applied to the stack, one piezoceramic compresses while the other one stretches. As a result, the stack bends. When such a stack is mechanically bent the same way, an electrical potential is created across the stack (or a portion of the stack). A single piezoceramic layer may also be polarized to create an electrical potential when bent. Additionally, a piezoceramic that compresses may be attached to a substrate with a particular stiffness such that the piezoceramic bends when an electric potential is applied to its electrodes. Thus, a piezoceramic may be

constructed to generate a voltage differential across its electrodes when the piezoceramic is bent.--

Please replace paragraph 34, located on page 9, with the following paragraph showing amendments.

--In this ~~manner~~ manner, piezo elements 114 and 124, or any piezo element taught herein, may be either a single layer element or a multiple layer element. For example, piezo 114 may be two oppositely polarized piezo elements stacked together that generates a potential across metal 113 and 115 when bent. Piezo 114 may alternatively be, for example, two piezo elements stacked together with the same polarization such that a potential is generated across metal 113 and 115 when compressed.--

Please replace paragraph 35, located on pages 9 and 10, with the following paragraph showing amendments.

--Multiple piezo arrays 100 may be stacked together. FIG. 1B shows stack ~~150~~ 150, in which piezo array 160 is stacked on top of piezo array 180. Each piezo array 160 and 180 preferably includes multiple piezo generators. As illustrated, piezo array 160 includes piezo generators 160-165 and piezo array 180 includes piezo generators 186-189. Arrays 160 and 180 may be stacked in a variety of ways. Arrays 160 and 180 may be stacked such that a piezo generator in array 160 aligns with a piezo generator in array 180. As ~~show,~~ shown, however, each piezo generator array 160 does not completely align with a piezo generator of array 180. For example, piezo generator 165 is aligned underneath a portion of piezo generator 187 and a portion of piezo generator 188. As a result, the overall area of stack 150 that includes partially aligned piezo generator

arrays is 1) easier, in at least some portions, to bend/compress/stretch; and 2) larger then a stack where the piezo generators are completely aligned.--

Please replace paragraph 36, located on page 10, with the following paragraph showing amendments.

--Like array 100, stack 150 includes isolation 191 and 192. A flexible isolation 191 and 192 may be utilized to provide a variety of applications. For example, if stack 150 included bending piezo ~~generators~~ generators, then isolation 191 and 192 may be a fabric. Furthering this example, ~~the~~ isolation 191 may be one or more layers of a fabric such as, for example, denim or cotton. Thus, stack 150 may be provided in denim or cotton based clothes. Placing a flexible stack 150 at the knee joints of Jeans would allow a second method to recapture the energy exerted during walking.--

Please replace paragraph 38, located on page 10, with the following paragraph showing amendments.

--It may be beneficial to ~~no~~ not utilize flexible isolation 191 and 192 as isolation whatsoever. A simple coating of isolation (e.g., a non-conductive polish or glue) may be placed (e.g., painted) around each piezo generator. Flexible isolation 191 and 192, however, may still be useful in stack 150. Particularly, flexible isolation 191 and 192 may protect the piezo generators from receiving stress past their tensile strength (e.g., the stress at which the piezoceramic would break). The flexibility of isolation 191 and 192 and the piezo generators may be chosen such that the piezo generators may compress/bend, but that isolation 191 and 192 will bend if

the stress reaches a particular point. For example, suppose flexible isolation 191 and 192 is denim. The flexibility of the denim may be chosen such that it is slightly greater than the flexibility of the piezo arrays. Thus, the piezo arrays may bend before the denim bends. However, if a large stress is applied to the denim, the denim may ~~preferable~~ preferably begin to bend and reduce the amount of stress on the piezo generators.--

Please replace paragraph 48, located on page 15, with the following paragraph showing amendments.

--By increasing the flexibility of an array, new applications may benefit from piezoelectric technology. For example, a flexible array of piezoelectric generators constructed in accordance with the principles of the present invention may be implemented into clothing. Patches of arrays may, using the above principles, be constructed such that the piezoelectric elements of the arrays bend only when the patch is bent a certain amount. Thus, you can create HIGH bend patches (arrays where the piezos only bend when the array is bent at a LARGE ~~amount~~ amount) and LOW bend patches (arrays where the piezos only bend when the array is bent at a SMALL ~~amount~~ amount). Thus, a jacket could become a personal generator where the elbows and underarms contain HIGH patches and the shoulders contain LOW patches.--

Please replace paragraph 52, located on pages 17 and 18, with the following paragraph showing amendments.

--Piezoceramic 613 may be included as three separate, and locally isolated, piezoceramics. These three piezoceramics are defined by lines 616 and 617 (the metal

layers may accordingly be separated and locally isolated from one another). Persons skilled in the art will appreciate that even though these three piezoceramics are initially isolated, the three components may be electrically coupled in any configuration (e.g., a series or parallel configuration). The isolation between the three piezoceramics may have a combined length to take into account the gain in length the piezoceramic, defined between lines 616 and 617, may take on when fully stretched (e.g., a downward force on tooth 611 would compress the height and increase the length of the piezoceramic defined between lines 616 and ~~617~~ 617). Thus, the piezoceramic defined between lines 616 and 617 may be polarized to be a compression/stretching piezoelectric. The piezoceramic defined to the left of line 616 may be polarized to create a particular polarity of voltage when bent in accordance with the portion of guide-tooth 611 to the left of line 616 ~~611~~. The piezoceramic to the right of line 617 may be configured similarly to the piezoceramic to the left of line 616 and may be polarized in a manner that creates the same polarity of voltage when bent.--

Please replace paragraph 61, located on page 22, with the following paragraph showing amendments.

--FIG. 9 shows clothing 900 embedded with piezoelectric generators or arrays. Shirt 920 and pants 930 are illustrated in FIG. 9. Other types of clothing may integrate piezoelectrics in accordance with the principles of the present invention. For example, coats, long sleeve shirts, shorts, and socks may integrate piezoelectrics. Such piezoelectrics may include piezo generators and/or arrays of the present invention. For example, clothing 900

may include piezoelectrics 910 situated above high-mobility areas of clothing 900. Particularly, piezo generators/arrays 911, 912, and 913 may be situated above all, or a ~~portion~~ portion, of a joint (e.g., upper shoulder joint 902, lower shoulder joint 901, and front knee joint 903). Examples of other joints that may be utilized ~~included~~ include the back of the knee joint 914 (e.g., the portion of pants 930 on the side directly opposite portion ~~903). The~~ 903), the shoulder bones (e.g., portions of the back), elbows, wrists, or any other portion of clothing 900 that would physically distort when moving.--